

TIAA Institute Fellows Symposium

Harnessing principles of behavioral finance to promote better retirement outcomes

A research forum co-hosted with the Pension Research Council

Research summaries report

March 5, 2021

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Dear Colleagues:

Welcome to **Harnessing principles of behavioral finance to promote better retirement outcomes**, a virtual Fellows Symposium co-hosted by the TIAA Institute and the Pension Research Council/Boettner Center at the Wharton School of the University of Pennsylvania. Today, we will review six innovative papers that examine ways to enhance Americans' lifelong financial security, presented by the researchers named below:

- **Auctioning annuities**
Gaurab Aryal, University of Virginia
- **Shoring up shortfalls: Women, retirement and the growing GigSupp economy**
Caroline Bruckner, American University
- **Testing methods to enhance longevity awareness**
Abigail Hurwitz, The Hebrew University of Jerusalem
- **Financial well-being among Black and Hispanic women**
Annamaria Lusardi, The George Washington University, TIAA Institute Fellow
- **The effect of the default investment on retirement allocations**
Thomas A. Rietz, The University of Iowa, TIAA Institute Fellow
- **How do behavioral approaches to increase savings compare? Evidence from multiple interventions in the U.S. Army**
Bill Skimmyhorn, William & Mary

These studies explore different behavioral factors and biases that affect retirement planning and other key financial decisions, a topic of increasing interest to plan sponsors and policymakers looking to improve retirement outcomes. You can find summaries of the findings on the pages that follow; brief biographies of the presenters are contained in a separate document.

Our organizations are proud to support this important work, and we are eager to hear your thoughts on the findings and implications.

Sincerely,



David P. Richardson
Head, TIAA Institute and
Managing Director of Research



Olivia S. Mitchell
Executive Director, Pension Research Council

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Auctioning annuities

Gaurab Aryal, University of Virginia

Using data on annuity contracts from Chile, we study an imperfectly competitive market where firms have private information about their annuitization costs. The Chilean market is a modified auction where retirees choose firms and annuity contracts that maximize their expected present discounted utilities. We propose an empirical framework to study markets for annuity contracts where risk-averse retirees have different preferences for bequests and firms' risk ratings and longevity risk. On the supply side, life insurance companies observe their retiree-specific annuitization costs and decide whether it is worthwhile to participate in the retiree auction. Upon participating, firms compete with each other for the retiree's savings. We find that retirees with the lowest savings have the highest information processing cost and that they also care about risk ratings the most. Some retirees show no preference for a bequest, but others exhibit a strong preference that increases with their savings. Our estimates also suggest that firms' annuitization costs vary across retirees and that they rise with savings. Using counterfactual exercises, we find that the utility and pension costs of asymmetric information are the largest for those with high savings. We also find that the increase in pensions from "shutting down" the risk ratings component and imposing an optimal auction is the largest for those with higher savings, but utility gains are minimal.

Key findings:

- Retirees' information processing costs and the weights they assign to firms' risk ratings in choosing an annuity contract increase with their savings.
- Close to 50% of retirees do not care about leaving a bequest, but the remaining 50% exhibit a strong preference that increases with savings.
- While the annuitization costs differ across both retirees and life insurance companies, and the cost increases with savings on average, there is a 1/5th probability that annuitization costs for high savers are very low.
- If the firms' annuitization costs were commonly known to all the firms, then it increases the pensions for all the retirees, but the gain accrues almost entirely to those with higher savings.
- If we replace the current two-stage rule with a simpler one-period English auction (with and without reserve price), the pension increases, but again it increases the most for those with larger savings. However, there is only minimal change in utilities, possibly due to the diminishing marginal utilities.

Shoring up shortfalls: Women, retirement and the growing GigSupp economy

Caroline Bruckner, American University

Today, millions of Americans use online platforms like Uber, Lyft, Etsy, and Airbnb to sell goods and services and connect with customers (“online gig workers”). Millions more provide paid care, sell goods, run errands, rent rooms, and do occasional jobs without an online platform to connect with customers (“offline gig workers”). While the majority of research has focused on the online gig workers who dominate the ridesharing platforms (mostly men), virtually none has been done on the retirement income implications of gig work as a supplemental source of income (“GigSupp Work”). This lack of research matters because more women engage in GigSupp Work and face a persistent retirement wealth gap. This report considers: (i) the retirement savings implications for GigSupp Work; and (ii) the federal tax, retirement policy, and financial literacy proposals that could better serve gig workers and enhance women’s retirement income security.

Key findings:

- GigSupp Work has grown significantly and is continuing to grow, but existing tax data have failed to fully capture the population of GigSupp Workers in large part because tax reporting rules enable extensive underreporting of self-employment income.
- Comparative review of multiple administrative and survey data sources suggests that more women than men engage in GigSupp Work and that women are driving GigSupp Work growth.
- The policy response to the COVID-19 pandemic reflects the systemic failure of government research to measure the GigSupp Workforce reliably. Moreover, the COVID-19 pandemic has led to even more GigSupp Work growth as employers shed traditional jobs and employees.
- GigSupp Work triggers a retirement financing gap that disproportionately impacts women, and notably, women of color, who have greater challenges saving for retirement than men.
- Absent change, the existing tax and retirement financing rules will continue to underserve and frustrate the ability of GigSupp Workers to save for retirement in the short term and, consequently, result in inadequate retirement incomes when they do ultimately retire.

Testing methods to enhance longevity awareness

Abigail Hurwitz, The Hebrew University of Jerusalem

Many people have only a vague notion of the concept of life expectancy and the longevity risk they face at older ages, which in turn implies that they are likely to save too little for retirement and have a low demand for longevity insurance products. Our paper employs an online experiment to investigate alternative ways to describe both life expectancy and longevity risk, with the goal of assessing whether these can raise peoples' awareness of possible retirement shortfalls. We also evaluate whether providing this information promotes interest in saving activity and demand for annuities. We find that providing longevity risk information impacts respondents' subjective survival probabilities, while simply describing average life expectancy does not. Yet providing life expectancy or longevity information significantly affects people's recommendations to annuitize one's retirement wealth. Interestingly, we also show that merely prompting people to think about financial decisions changes their perceptions of subjective survival probabilities.

Key findings:

- Getting people to think about a long-term financial decision can alter their optimism regarding survival probabilities.
- Providing people who are pessimistic regarding their survival probabilities with either life expectancy or longevity information significantly affects their financial advice regarding longevity insurance products.
- Providing people with information about prospective longevity changes their optimism regarding long lives but does not alter their subjective estimate of life expectancy.
- Our results can inform insurers and policymakers on how to encourage people to annuitize and make other financial decisions relevant for later life.

Financial well-being among Black and Hispanic women

Annamaria Lusardi, The George Washington University, TIAA Institute Fellow

We provide an in-depth examination of the financial well-being of Black and Hispanic women and the factors contributing to it using the 2018 wave of the National Financial Capability Study. We document meaningful differences between Black and Hispanic women versus White women, in that the former are more likely to face economic challenges that depress financial well-being. Controlling for differences in socio-demographic characteristics, there are additional factors that contribute to financial well-being for Black and Hispanic women compared to White women, including differential impacts of education, family structure, employment, and financial literacy. Our results imply that extant financial education programs inadequately address the needs of many Black and Hispanic women.

Key findings:

- Using the U.S. Consumer Financial Protection Board Financial Well-being (FWB) Scale, we find meaningful differences in the demographic factors that contribute to FWB across race and ethnicity, including education, family structure, employment, and financial literacy.
- These differences provide insight into why subjective FWB scores do not appear to differ across race and ethnicity despite objective measures, such as borrowing behavior, indicating strong differences.
- Our findings lead us to conclude that a “one size fits all” approach is unlikely to address differences in financial well-being across the board and, in particular, across sub-groups of women.

The effect of the default investment on retirement allocations

Thomas A. Rietz, The University of Iowa, TIAA Institute Fellow

Prior studies have found that automatically enrolling employees in a retirement plan, unless they opt out, significantly increases plan enrollment. Moreover, a large body of research suggests that new employees tend to contribute at the default rate and allocate their savings to the default investment. This paper adds to existing research by analyzing participant behavior under two different default investment scenarios at the same employer—one involving a money market fund and the other a target-date fund—and finds that the type of default has a big impact on participants' behavior and ultimate equity exposure. Specifically, we analyze behavior of participants who joined the University of Iowa TIAA retirement plan before and after the plan changed its default investment from a money market fund to a target-date fund. Participants who do not actively choose their allocations automatically have their funds invested in the default investment. To understand factors driving differences in participant behavior, we combined TIAA administrative data with University of Iowa human resources data and, for a subset of participants, analyzed experimental data on risk preference, financial knowledge and self-reported financial expertise.

Key findings:

- Participants who joined the retirement plan with a money market fund default tend to switch away from the default soon after joining.
- Those who join the plan with a target-date fund default on average remain fully invested in that fund.
- When the default is a target-date fund, plan participants on average hold more equity than they do when the default is a money market fund, despite participants' subsequent investment allocations.

How do behavioral approaches to increase savings compare? Evidence from multiple interventions in the U.S. Army

Bill Skimmyhorn, William & Mary

In recent years, employers have developed a number of methods to encourage retirement savings among their employees, and academic researchers have studied their varying effects. Research has documented that information provision, choice simplification, social messaging, active-choice frameworks, and automatic enrollment all increase retirement savings. However, gauging the relative efficacy of these approaches has been challenging because the existing research relies on diverse populations over long periods, and very few studies have incorporated costs into their analyses. In this study, we use quasi-experimental and experimental variation in policy exposure within a single institutional setting to examine the relative efficacy of leading policy options designed to increase retirement savings (i.e., information emails, action steps, target contribution rates, active choice, and automatic enrollment). We also complement these analyses with measures of program costs. Consistent with the previous literature, we find sizable effects on participation and cumulative contributions that increase with the intensity of the intervention. We exploit administrative and estimated cost data to complete the most detailed cost-effectiveness analysis in the literature to date. Our analysis suggests that active choice programs are the most cost-effective method to generate new program participation and contributions for small, medium, and large firms, while automatic enrollment is more cost effective for very large firms.

Key findings:

- Light touch interventions like information, action steps, and target contribution rates increase retirement savings rates by 0.2-0.7 percentage points (6-9% effect sizes); active choice increases participation by 11 percentage points (104%); and automatic enrollment increases participation by 37 percentage points (208%).
- We find similar effects and effect sizes when we analyze contribution rates and cumulative contributions.
- Our cost-effectiveness analysis scales these program effects by their costs and suggests that active choice programs are the most cost-effective method to generate new enrollments for small (n=25 employees), medium (n=750 employees), and large firms (n=1,000 employees), while automatic enrollment is the most cost-effective program for very large firms.



Pension Research Council

About the TIAA Institute

Since 1998, the TIAA Institute has helped advance the ways individuals and institutions plan for financial security and organizational effectiveness. The Institute conducts in-depth research, provides access to a network of thought leaders and enables those it serves to anticipate trends, plan future strategies and maximize opportunities for success. To learn more, visit www.tiaainstitute.org.

About the Pension Research Council

For over 65 years, the Pension Research Council/Boettner Center at the Wharton School of the University of Pennsylvania has sponsored research on the entire range of private pension and Social Security programs, as well as related benefit plans in the United States and worldwide. Learn more at www.pensionresearchcouncil.wharton.upenn.edu.